

I Claim:

1. The insulin analog A0^{Arg}A21^{Gly}B31^{Arg}B32^{Arg}-human insulin.

5 2. A composition comprising the insulin analog of claim 1.

3. The composition of claim 2, wherein the composition is a pharmaceutical composition.

10 4. The composition of claim 3, further comprising one or more pharmaceutically acceptable excipients.

5. The composition of any one of claims 2-4, further comprising a divalent metal cation.

15 6. The composition of claim 5, wherein the divalent metal cation is zinc.

7. The composition of any one of claims 2-6, further comprising a phenolic preservative.

20 8. The composition of any one of claims 2-6, further comprising an isotonicity agent.

9. A method of treating hyperglycemia, the method comprising administering
25 the insulin analog of claim 1 to a subject in an amount sufficient to regulate blood glucose concentration in the subject.

10. A method of treating hyperglycemia, the method comprising administering
30 the composition of any one of claims 2-8 to a subject in an amount sufficient to regulate blood glucose concentration in the subject.

11. The method of claim 9 or 10, wherein the subject is treated for diabetes mellitus.

12. The insulin analog A0^{Arg}A21^{Gly}B29^{Arg}B31^{Arg}B32^{Lys}-human insulin.

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13. A composition comprising the insulin analog of claim 12.

14. The composition of claim 13, further comprising one or more pharmaceutically acceptable excipients.

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15. The composition of any one of claims 12-14, further comprising a divalent metal cation.

16. The composition of claim 15, wherein the divalent metal cation is zinc.

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17. A method of treating hyperglycemia, the method comprising administering the composition of any one of claims 12-16 to a subject in an amount sufficient to regulate blood glucose concentration in the subject.

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18. Proinsulin analog A21^{Gly}B0^{Lys}B29^{Arg}B32^{Lys}-human proinsulin.

19. A composition comprising the proinsulin analog of claim 18.

20. Proinsulin analog A21^{Gly}B29^{Arg}B32^{Lys}-human proinsulin.

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21. A composition comprising the proinsulin analog of claim 20.